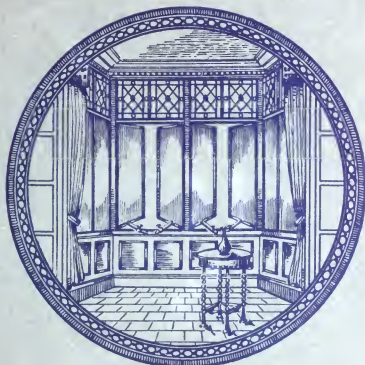


GARDINER·SONS & CO^{LTD}
MIDLAND IRON WORKS
— — — **BRISTOL** — — —



MAKERS OF
METAL WINDOWS
IN
STEEL AND BRONZE

♦ **CATALOGUE N^o 153** ♦

TELEPHONE
N^o 5670 (5 LINES)

TELEGRAPH
"GARDSONS BRISTOL"



G

Ma

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Ca

GARDINER, SONS & C^o.

LIMITED

Manufactory :

Midland Ironworks, St. Philip's, Bristol

Telegraphic Address : "GARDSONS, BRISTOL."

Telephone No. 5640 (5 lines).

BRISTOL

Showrooms & Offices :

Nelson Street

Telegrams : "GARDSONS, BRISTOL."

Telephone : 5640 (5 lines).

LONDON OFFICE

Brownlow House,

50/51 High Holborn, W.C. 1

Telephone : Chancery 8677.



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A Few Examples of Work Recently Executed

By

GARDINER, SONS & CO. LTD. MIDLAND IRON WORKS
BRISTOL



LLOYDS BANK, CORN STREET, BRISTOL.
METAL WINDOWS.

Messrs. WALLER & SON,
Architects, Gloucester.

GARDINER, SONS & CO^{LTD} MIDLAND IRON WORKS BRISTOL



PORTISHEAD POWER STATION.
STEEL SASHES AND GEARING.

H. M. DE COLLEVILLE, Esq., A.M.I.N.S.T.M. & C.Y.E.
Architect, London.



"THE FRIARS," WINCHELSEA.
CASEMENTS.

REGINALD T. BLOMFIELD, Esq., F.R.I.B.A.,
Architect, London.

GARDINER, SONS & CO^{LTD} MIDLAND IRON WORKS BRISTOL



MAKERS OF
Improved Air-Tight Show Cases with Metal Frames & Doors

AS MADE FOR THE
VICTORIA AND ALBERT MUSEUM
SOUTH KENSINGTON.



GOVERNMENT BUILDINGS, KINGSTON, JAMAICA.
STEEL SASHES, LOUVRE VENTILATORS AND FRENCH WINDOWS.

MESSE, SIR CHARLES NICHOLSON AND CORLETT,
Architects, London.

GARDINER, SONS & CO LTD MIDLAND IRON WORKS BRISTOL



CAVENDISH HOUSE, BRISTOL.
BRONZE WINDOWS AND PANELS.

W. H. WATKINS, ESQ., F.R.I.B.A.,
Architect, Bristol.



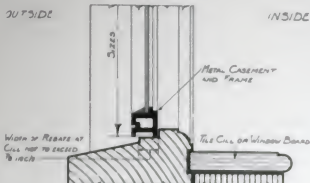
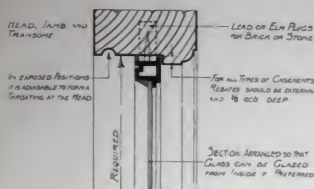
DOWNING STREET, CAMBRIDGE.
CASEMENTS.

MESSE, STEVENSON AND REDFERN, F.R.I.B.A.,
Architects, London.

ON the opposite page we show some suggestions for preparing Stone, Brick, and Wood Openings to take Metal Windows.

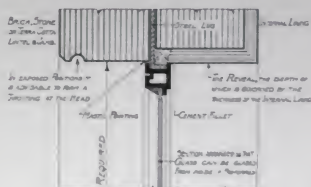
When customers are preparing their drawings we shall be pleased to send details so that their frames may be prepared in such a way that we can quote for the most economical and efficient sections to suit the particular requirements of the building.

APPLICATION OF METAL WINDOWS



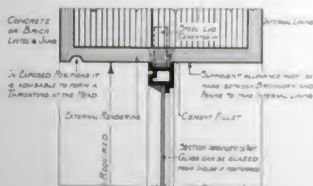
Scale: 1/2 Full Size.

The above illustrates the preparation required for rebated stone or wood frames to take metal casements as generally required for Domestic, Church and School Windows and as shown on pages 10 to 17.



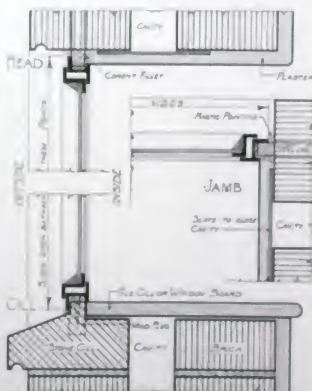
Scale: 1/2 Full Size.

The above illustrates metal windows as shown on page 10 and 11 fixed in an opening with a reveal and internal face of opening finished with cement or plaster.



Scale: 1/2 Full Size.

The above illustrates metal windows as shown on pages 10 and 11 fixed in an opening with no reveal but with rough cast outside and plaster rendering inside.



Scale: 1/2 Full Size.

The above illustrates metal windows as shown on page 12 fixed to hollow brick walls with plaster rendering inside.

GARDINER, SONS & CO^{LD} MIDLAND IRON WORKS BRISTOL

COMPOSITE METAL WINDOWS



A 90.

The Windows can be made of different size sections as shown on page opposite.

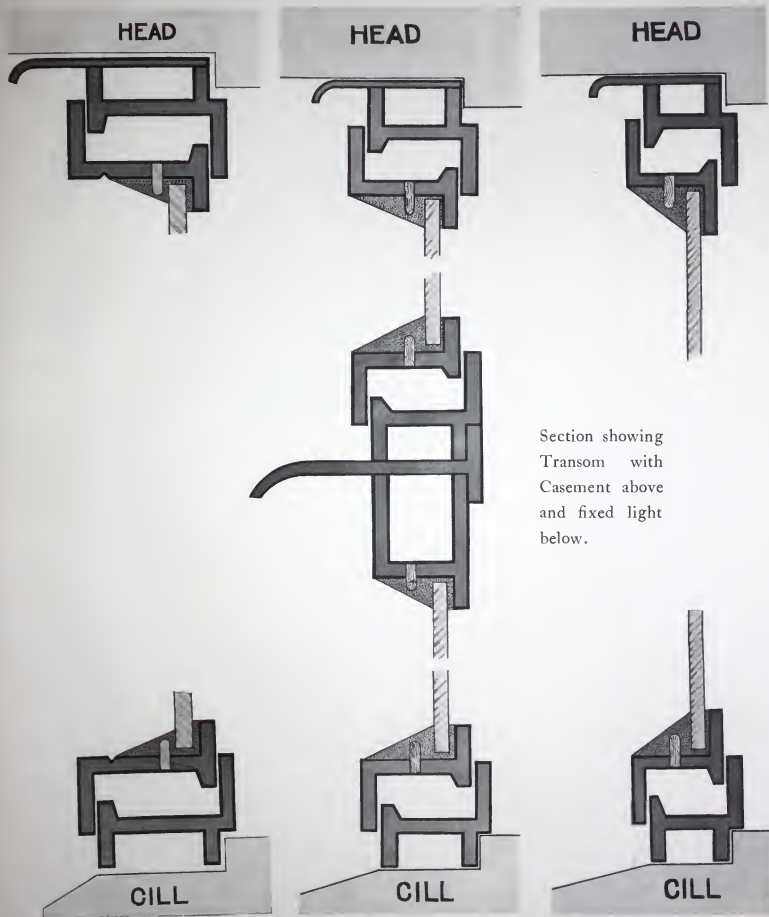
We can supply the section in Steel or Bronze Metal.



A 91.

COMPOSITE METAL WINDOWS

Full size Sections for Windows shown on Page 10.



Section showing
Transom with
Casement above
and fixed light
below.

Section A 146.

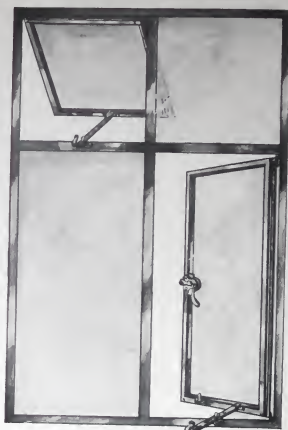
Section A 145.

Section A 149.

GARDINER, SONS & CO LTD MIDLAND IRON WORKS BRISTOL

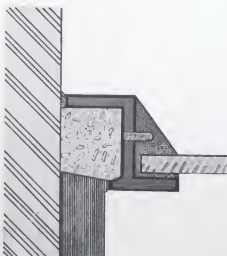
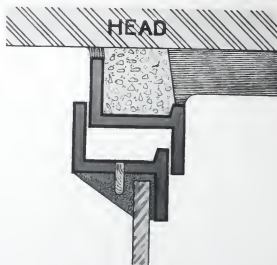
COMPOSITE

These sections are suitable for windows where all vents open outwards.



WINDOWS

The windows are made to customers' sizes and designs, and can be made of heavier sections when necessary.

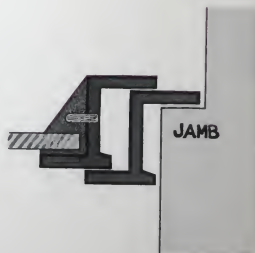


JAMB.

Brick with Plaster Inside.

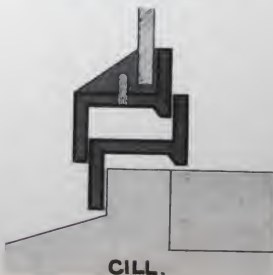


MULLION SECTION.



JAMB.

Rebated Stone or Wood.



CILL.



Alternative Wide Flange Frame.

FULL-SIZE SECTIONS

GARDINER, SONS & CO LTD MIDLAND IRON WORKS BRISTOL

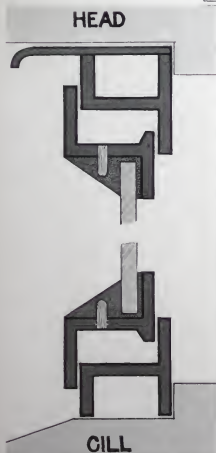
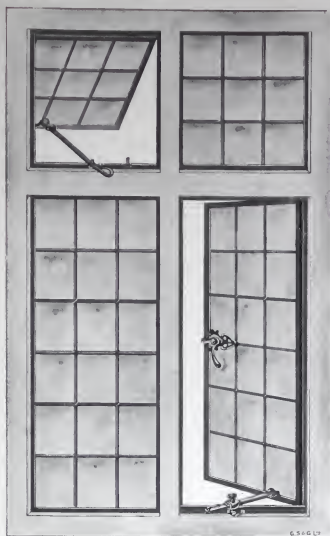
Side-hung
and
Top-hung
Casements

Opening
Outwards

Guaranteed
Watertight

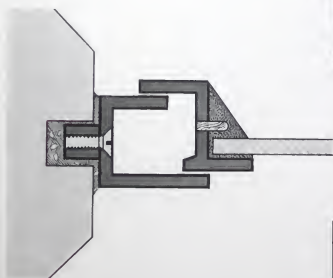
The illustration shows
Casements fitted with
Leaded Lights.

They can be made for
one pane of glass or
divided into any number
of panes to take sheet
glass.

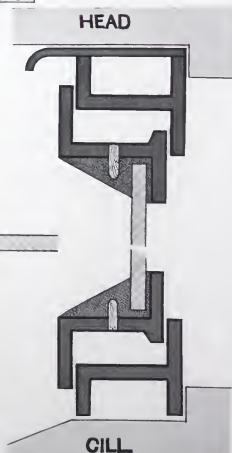


A 156.

Suitable for Casements up to 3 ft. 6 in. high.



Section showing Casements with
loose-fixing fillets for fixing
to grooved stone-work.



A 157.

Suitable for Casements up to 4 ft. 6 in. high.

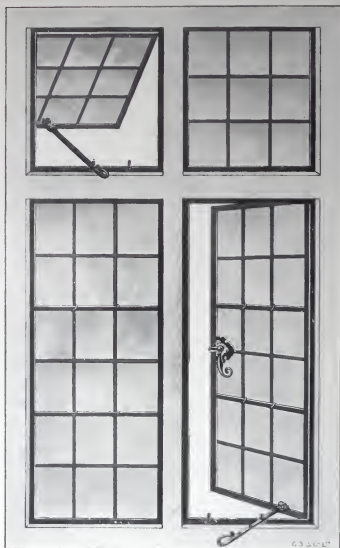
FULL-SIZE SECTIONS

GARDINER, SONS & CO^{LD} MIDLAND IRON WORKS BRISTOL

Side-hung
and
Top-hung
Casements

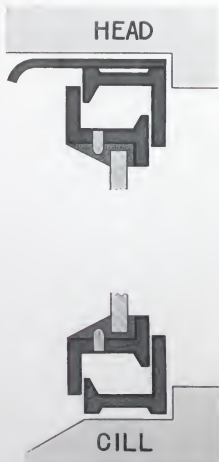
The illustration shows
Casements fitted with
Leaded Lights.

They can be made for
one pane of glass or
divided into any number
of panes to take sheet
glass.



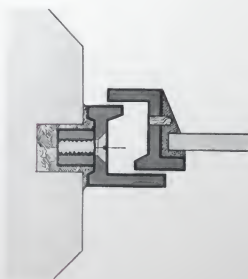
Opening
Outwards

Guaranteed
Watertight



A 53 D.

Suitable for Casements up to 3 ft. 6 in. high.



Section showing Casement with loose
fixing fillets for fixing to
grooved stonework.



A 53 F.

Suitable for Casements up to 4 ft. high.

FULL-SIZE SECTIONS

GARDINER, SONS & CO LTD MIDLAND IRON WORKS BRISTOL

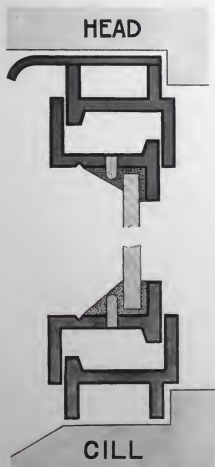
Side-hung
and
Top-hung
Casements

Opening
Outwards

Guaranteed
Watertight

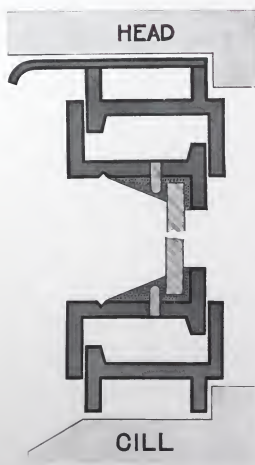
The illustration shows
Casements fitted with
Leaded Lights.

They can be made for
one pane of glass or
divided into any number
of panes to take sheet
glass.



A 145.

Suitable for Casements up to 5 ft. high.



A 146.

Suitable for Casements up to 6 ft. high.

FULL-SIZE
SECTIONS

GARDINER, SONS & CO^{LTD} MIDLAND IRON WORKS BRISTOL

Side-hung
and
Bottom-hung
Casements

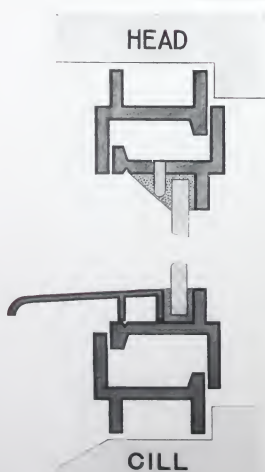
The illustration shows
Casements fitted with
Leaded Lights.

They can be made for
one pane of glass or
divided into any number
of panes to take sheet
glass.



Opening
Inwards

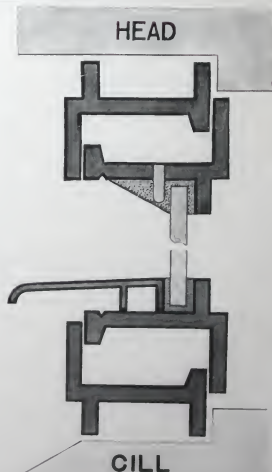
Guaranteed
Watertight



A 145.

Suitable for Casements up to 3 ft. 6 in. high.

FULL-SIZE
SECTIONS



A 146.

Suitable for Casements up to 4 ft. 6 in. high.

GARDINER, SONS & CO LTD MIDLAND IRON WORKS BRISTOL

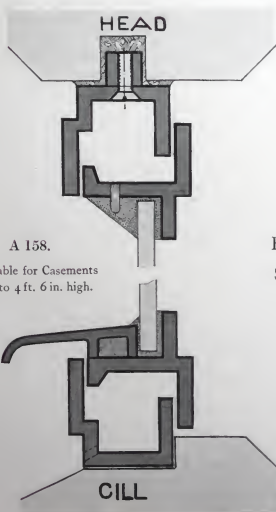
Side-hung
and
Bottom-hung
Casements

Opening
Inwards

Guaranteed
Watertight

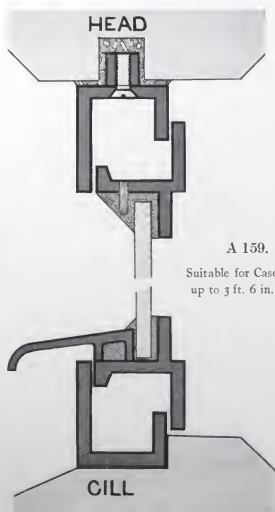
The illustration shows
Casements fitted with
Leaded Lights.

They can be made for
one pane of glass or
divided into any number
of panes to take sheet
glass.



A 158.
Suitable for Casements
up to 4 ft. 6 in. high.

FULL-SIZE
SECTIONS



A 159.
Suitable for Casements
up to 3 ft. 6 in. high.

GARDINER, SONS & CO^{LTD} MIDLAND IRON WORKS BRISTOL



Steel Casements only to hang to Wood Frames

FULL-SIZE SECTIONS



A 56 B.



A 57 E.



A 57 G.

FIXED LIGHTS

FULL-SIZE SECTIONS



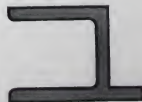
Section B.



Section D.



Section H.

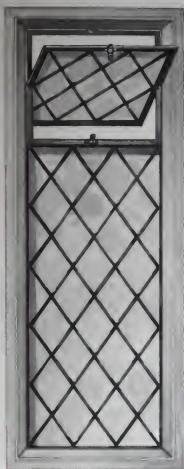


Section K.



Section L.

The above are Sections for Fixed Lights where a Steel Frame is required to match Opening Casements.



SWING CASEMENTS

WITH

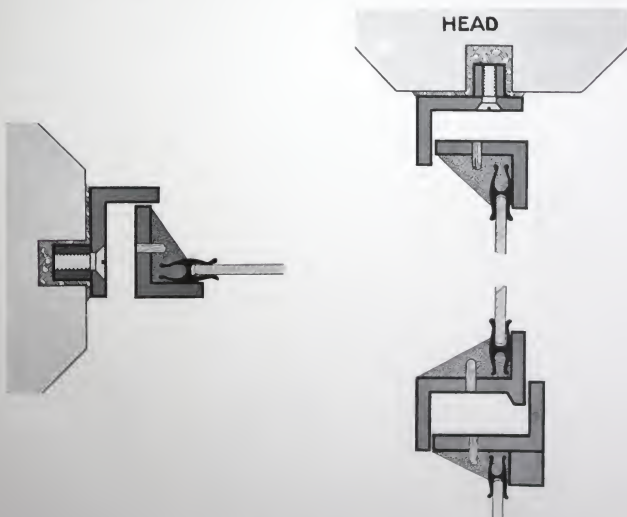
Glazing Below

as required for

Churches, Schools, etc.

The illustration shows a Casement prepared to take glazing below.

The Leaded glazing below is glazed direct into the stonework.



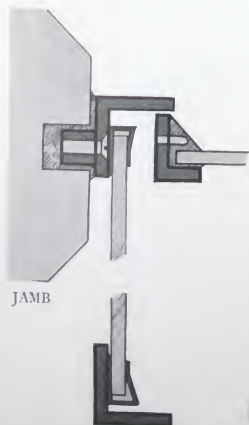
SECTION A 67 F, FULL-SIZE



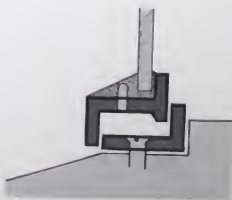
HOPPER CASEMENTS WITH WINGS TO GLAZE

as required for

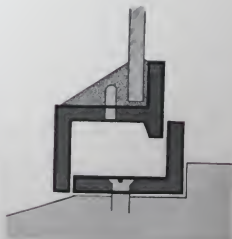
Churches, Schools
etc.



Section at Head
to take Glass
above.



CILL
Section A 68 B.

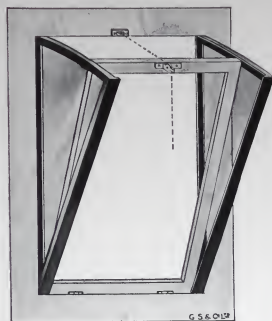


CILL
Section A 68 C.

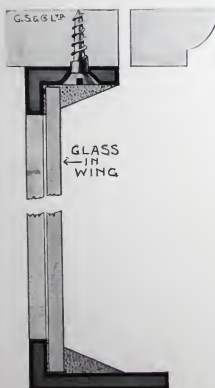
GARDINER, SONS & CO^{LTD} MIDLAND IRON WORKS BRISTOL

Wrot
Steel
Hopper
Wings
Only

For
Wood
Casements



Section A 69.



Section A 69 B.



Section A 69 E.

FULL-SIZE SECTIONS

SCHOOL WINDOWS

The illustration shows one of the most popular types of Steel Windows used for Schools.

We shall be pleased to submit designs or quote to customers' own designs.



A 77.

Fixed Hopper Frames
for Wood Sliding Sashes

CASEMENT HANDLES



HANDLE - No. A 101
PLATE - - No. A 101



HANDLE - No. A 102
PLATE - - No. A 115



HANDLE & PLATE - - No. A 104



HANDLE - No. A 109
PLATE - - No. A 109

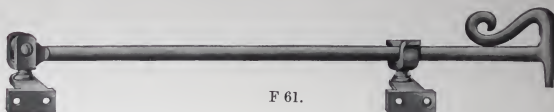


HANDLE - No. A 116
PLATE - - No. A 107



HANDLE - No. A 117
PLATE - - No. A 117

CASEMENT STAYS



F 61.



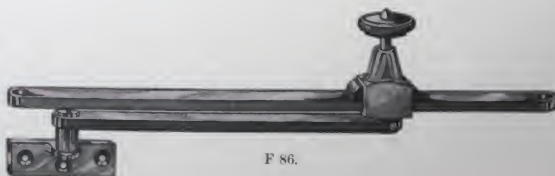
F 62.



F 88.



F 67.



F 86.

SPRING CATCHES



F 231.



F 232.



F 230.



F 227.



F 270.
ESPAGNOLETTE
BOLT.



F 269.



A 120.

LEGGOTT'S PATTERN FANLIGHT OPENER.

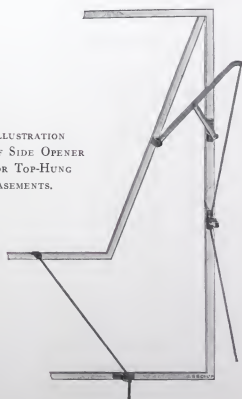


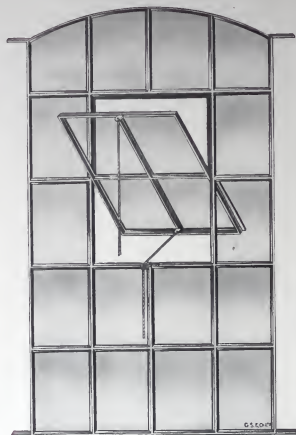
ILLUSTRATION
OF SIDE OPENER
FOR TOP-HUNG
CASEMENTS.

A 122.

IMPROVED DOUBLE FASTENERS.
Suitable for Casements 5 ft. high and upwards.

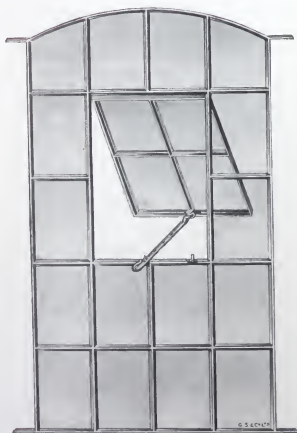
Improved Wrot Steel Mitre Joint Sashes

Wrot Steel Sashes
made to any size,
shape or division
of panes



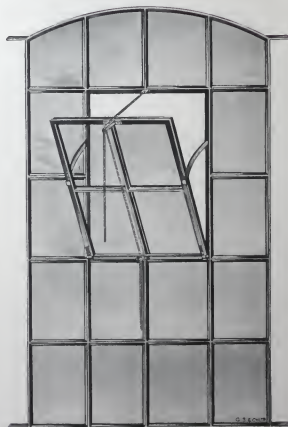
A 130.

Ventilator hung on centres, and fitted with pulley
and eyes for Cords.



A 131.

Ventilator hung at top, and fitted with
push-out stay.

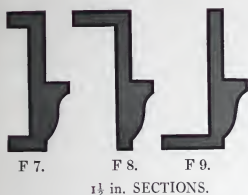
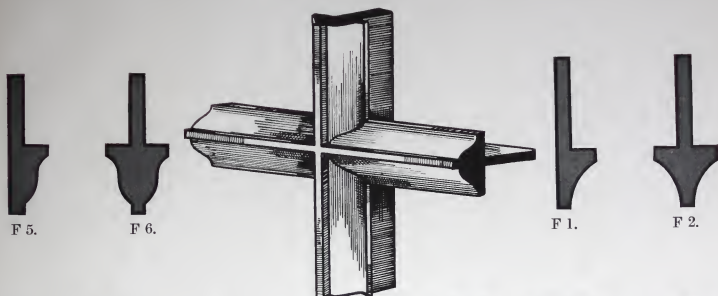


A 132.

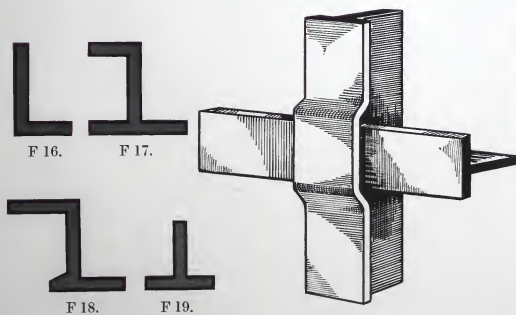
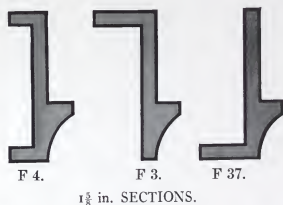
Ventilator hung at bottom, and fitted with
Quadrant Stops and Pulleys for Cords.

For Illustrations of Spring Catches and Special Openers, see page 25.

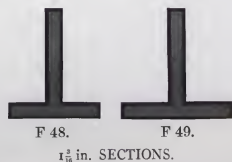
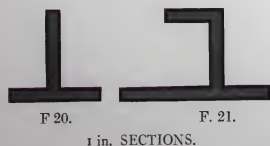
SASH SECTIONS



Mitre Joint Sashes



Lock Joint Sashes

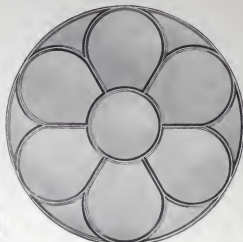


GARDINER, SONS & CO LTD MIDLAND IRON WORKS BRISTOL

Improved Wrought Steel Mitre Joint Sashes



A 136.



A 135.



A 137.



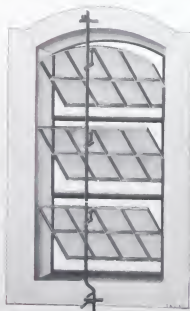
A 143.



A 144.



A 162.



A 141.



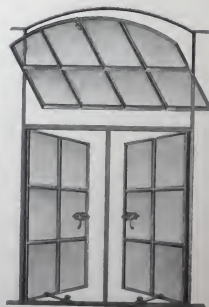
A 138.



A 139.



A 140.



A 142.

The above are illustrations of some of many types of Steel Windows we make. They are made to customers' sizes and requirements.

GARDINER, SONS & CO LTD MIDLAND IRON WORKS BRISTOL

Ornamental Metal Windows

SUITABLE FOR
MUNICIPAL
BUILDINGS,
BANKS, OFFICES,
ETC.



A 167.



A 165.



A 166.

Ornamental Doors for Municipal Buildings, Banks, Offices, etc.

These may be made in Steel or Bronze.

Designs and Estimates submitted on receipt of requirements.

Windows for Hospital Theatre Rooms



The above is an illustration of special windows supplied by us for Operating Theatres. The Roof is constructed of Lead Covered Puttyless Glazing and the Vertical portion of Steel or Bronze Casements.

Prices on receipt of sizes.

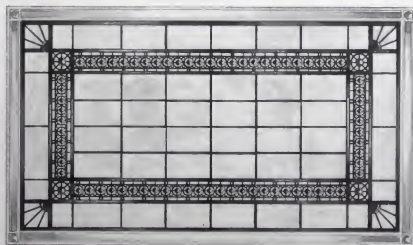
Steel Domes with Lead Lights in Bent Glass



A 164.

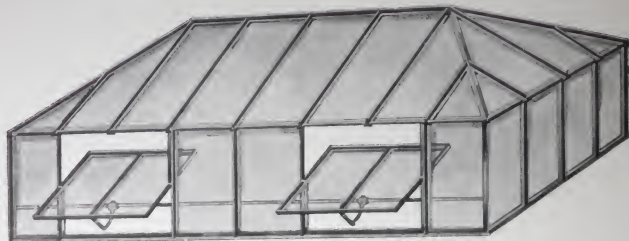
Special Designs submitted to suit Customers' requirements, or we shall be pleased to quote to Customers' own Designs.

Flat Steel Laylight with Coloured Lead Lights

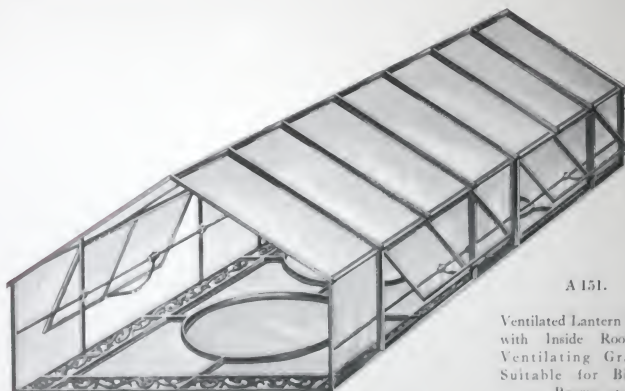


A 169.

Roofs, Ventilators, and Dome Lights



A 150. Ventilated Lantern Light.



A 151.

Ventilated Lantern Lights,
with Inside Roof and
Ventilating Grating.
Suitable for Billiard
Rooms, etc.



A 152.

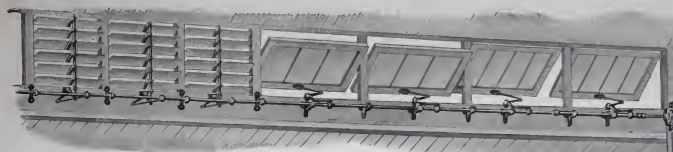


A 153. Dome Light.

The above Illustrations are only suggestions. Roof Lights of any size or shape can be made.
Prices on receipt of requirements.

GARDINER, SONS & CO^{LD} MIDLAND IRON WORKS BRISTOL

Opening Gear



F 1460.



F 157. Top Lights.



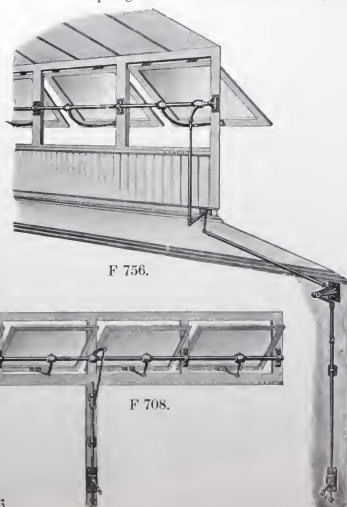
F 1461. Top Lights.

F 158. Front Lights.

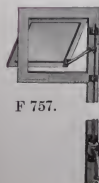
F 1462. Front Lights.



F 161.



F 756.



F 757.



F 759.



F 708.

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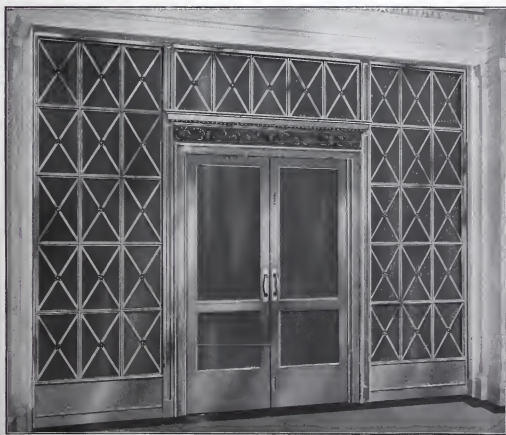
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